DOCUMENT RESUME

ED 295 571 IR 013 164

TITLE Telecommunications Policy Research Conference. Capital Recovery Section. Papers.
INSTITUTION Telecommunications Policy Research Conference, Inc., Washington, DC.
PUB DATE Sep 87
NOTE 12p.; Papers presented at the Telecommunications Policy Research Conference (15th, Airlie, VA, September 27-30, 1987). For the conference program and additional papers, see IR 013 160-182.
PUB TYPE Viewpoints (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Capital; *Capital Outlay (for Fixed Assets); *Competition; Cost Effectiveness; *Investment; Operating Expenses; Tax Credits; *Telephone Communications Industry
IDENTIFIERS *Depreciation; Federal Communications Commission; New York; *Regulatory Agencies; Tax Reform Act 1986

ABSTRACT

Two papers consider the capital recovery difficulties of telephone companies in the current deregulatory environment. The first, "Capital Recovery in the Transition Period" (Gail Garfield Schwartz, New York State Public Service Commission) describes the process determining depreciation in both regulated and deregulated environments, and argues that decisions to permit companies to draw out their depreciation of corporate assets should be made on a case by case basis. The second paper, "The Negative Effects of Tax Reform on the Telephone Industry" (Jeffrey A. Rohlfs, with Susan Leisner and Charles Jackson) (abstract only), details the effects of the 1986 Tax Reform Act on capital recovery and internal cash flow practices of telephone companies. It concludes that, with the elimination of the investment tax credit and a reduction in the level of deferred taxes, the new tax law has exacerbated the problems created by inadequate capital recovery, and limited the telephone industry's ability to use internal funds to replace and modernize its plants. (Author/EW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED295571

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

TELECOMMUNICATIONS POLICY RESEARCH CONFERENCE

Capital Recovery Section

Airlie, Virginia

September 27-30, 1987

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Edward Zajec

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR013164

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CAPITAL RECOVERY IN THE TRANSITION PERIOD

BY GAIL GARFIELD SCHWARTZ, PH.D

DEPUTY CHAIRMAN, NEW YORK STATE PUBLIC SERVICE COMMISSION

PRESENTED TO

AIRLIE HOUSE CONFERENCE

SEPTEMBER 28, 1987

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Edward Zajec

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Gail Garfield Schwartz

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR013164

ACKNOWLEDGEMENT: LINDA HORLBECK, RICHARD ANSALDO, JAMES AUGSTELL, FREDERICK PERKINS AND FRANK HERBERT OF THE NYS PSC STAFF WERE MOST HELPFUL IN PREPARING THIS PAPER. ERRORS ARE THE FAULT OF THE AUTHOR.

TODAY I WANT TO MAKE THREE POINTS. THEY ARE:

1. THE CURRENT POLARIZATION OVER CAPITAL RECOVERY IS TO A LARGE EXTENT EXAGGERATED. IT SINGLES OUT THE LEAST-SOPHISTICATED REGULATORS AND PRETENDS THAT THEY REPRESENT ALL REGULATORS. THIS IS NOT THE CASE. NEW YORK REGULATION IS AN EXAMPLE OF REGULATION THAT RESPECTS ECONOMIC DEPRECIATION, AND, IN FACT, HAS OFTEN BEEN AHEAD OF THE FCC AS WELL AS AHEAD OF REGULATORS IN OTHER STATES.

2. TO THE EXTENT THAT TELCOS--AND OF COURSE, I MEAN THE BOCS, IN PARTICULAR--FAIL TO RECOGNIZE CONSTRUCTIVE REGULATORY TREATMENT OF DEPRECIATION AS BENEFICIAL TO THEM, THE PUBLIC, INCLUDING BOTH RATEPAYERS AND INVESTORS, WILL SUFFER.

3. AS WE LOOK TO THE FUTURE COMPETITIVE SITUATIONS, AND ADOPT INNOVATIVE APPROACHES TO RATE MAKING AND RATE DESIGN, WE WILL ALSO HAVE TO DEVISE INNOVATIVE APPROACHES TO THE DEPRECIATION OF SUNK INVESTMENT THAT WILL NOT CHARGE CAPTIVE RATEPAYERS FOR EQUIPMENT USED LARGELY FOR UNREGULATED OR LOOSELY REGULATED PORTIONS OF THE TELCO BUSINESS; TRULY ECONOMIC DEPRECIATION WILL ACCOMPLISH THIS OBJECTIVE WHILE AT THE SAME TIME, ALLOWING TELCOS TO MAKE NEW INVESTMENTS AS THEY SHOULD, THAT IS, BASED ON THE ANTICIPATED REVENUES THOSE INVESTMENTS WILL INDUCE.

OUR STARTING POINT IS THE DEFINITION OF ECONOMIC DEPRECIATION, AND ITS FUNCTION IN AN ENVIRONMENT THAT HAS BEEN TOTALLY REGULATED AND WILL BE AT LEAST PARTLY COMPETITIVE, AND SOONER OR LATER, DEREGULATED OR LIGHTLY REGULATED.

ECONOMIC DEPRECIATION MEASURES THE CHANGE IN THE VALUE OF AN ASSET OVER TIME.

THE PRESUMED CONFLICT BETWEEN REGULATED DEPRECIATION PRACTICES AND DEPRECIATION PRACTICES IN A COMPETITIVE ENVIRONMENT IS COMMONLY STATED ALONG THE LINES OF THE FOLLOWING:

> IF, OVER THE LIFE OF A PIECE OF EQUIPMENT, THE REGULATOR ALLOWS AN ACCOUNTING RATE OF RETURN EQUAL TO THE COST OF CAPITAL, THEN THE PRESENT VALUE OF THE ALLOWED CASH FLOW WILL BE THE SAME NO MATTER WHAT DEPRECIATION METHOD IS USED. THE PRICE STREAM MAY BE DIFFERENT, BUT SINCE THERE IS NO COMPETITION, PRICES CAN BE ADJUSTED SO THAT REVENUES REQUIRED TO GENERATE THE NECESSARY CASH FLOWS WILL BE FORTHCOMING. ON THE OTHER HAND, UNDER COMPETITION, PRICES MAY NOT BE ADJUSTABLE TO MAKE UP FOR MISMEASURED DEPRECIATION CHARGES, BECAUSE PRICE IS SET BY THE COMPETITIVE MARKET.[1]

PARTICULAR DEPRECIATION METHODS ARE SIGNIFICANT IN A COMPETITIVE ENVIRONMENT BECAUSE THEY DETERMINE NET INCOME DERIVED FROM ANY INCOME STREAM. ANY OVERESTIMATION OF THE DEPRECIATION WILL ARTIFICIALLY REDUCE THE INCOME ESTIMATE, AND CONVERSELY, UNDERDEPRECIATION WILL OVERSTATE NET INCOME. (UNDER REGULATION, RATES WILL CHANGE AND NET INCOME WILL BE HELD CONSTANT). THE QUESTION IS, IS THERE ANY REAL DIFFERENCE BETWEEN ACCOUNTING DEPRECIATION PROPERLY APPLIED AND ECONOMIC DEPRECIATION?

UNLIKE THE VILLAINS SOME OBSERVERS SEE ALL AROUND THEM IN THE REGULATORY WORLD, WE IN NEW YORK DO NOT VIEW ACCOUNTING DEPRECIATION AS A RIGID SYSTEM THAT RECOGNIZES NOTHING MORE THAN THE PHYSICAL DETERIORATION OF ASSETS. RATHER, WE FOLLOW THE UNIFORM SYSTEM OF

[1. BIDWELL]

ACCOUNTS FOR TELEPHONE CORPORATIONS, IN WHICH DEPRECIATION "MEANS THE LOSS IN SERVICE VALUE NOT RESTORED BY CURRENT MAINTENANCE....[THE CAUSES OF WHICH INCLUDE] OBSOLESCENCE AND CHANGES IN DEMAND...."[2]

THE COMPETITIVE FIRM MAKES ITS INVESTMENT DECISIONS ON THE BASIS OF ESTIMATES OF THE NET INCOME STREAM, CONSIDERING THE PRICE IT CAN EXPECT TO CHARGE, OVER A SPECIFIC TIME.

SPECIFICALLY, THIS IS ACCOMPLISHED AS FOLLOWS. FIRST THE ECONOMIC LIFE OF THE EQUIPMENT IS FORECAST. THIS ESTIMATE IS BASED IN TURN ON AN ESTIMATE OF THE RATE OF OBSOLESCENCE OF THE EQUIPMENT AND THE LIKELIHOOD OF SIGNIFICANT TECHNOLOGICAL SUBSTITUTES FOR IT. INFLATION RATES ARE PROJECTED. A PRICE OR SET OF PRICES IS CALCULATED. THE OBJECTIVE IS TO CHOOSE A SET OF INITIAL PRICES SUCH THAT THE PRESENT VALUE OF FUTURE CASH FLOWS ASSOCIATED WITH THE ASSET IS AT LEAST EQUAL TO THE COST OF THE ASSET. IN THEORY, THIS SHOULD BE THE CASE IN EACH OF THE YEARS OF THE ECONOMIC LIFE OF THE ASSET, AND, IF THE EXPECTED (FIRST-YEAR MARKET) PRICE IS LESS THAN THE FIRST YEAR COST, THE PRESENT VALUE OF THE ASSET'S FUTURE CASH FLOWS WILL BE LESS THAN ITS COST AND THE INVESTMENT SHOULD NOT BE MADE. (OTHER CONSIDERATIONS, SUCH AS GROWTH IN MARKET SHARE, MIGHT CAUSE A DECISION MAKER TO MODIFY THIS RIGID EVALUATION.)

NOW HERE WE CAN GET INTO SOME NICETIES. THEORY INDICATES THAT PRICES ARE A FUNCTION OF TECHNOLOGY, AND THE MORE OBSOLETE THE TECHNOLOGY IN USE, THE LOWER THE PRICE IT WILL COMMAND. OVER THE MEDIUM TO LONG RUN, THIS IS SO, AS THE RATE OF TECHNOLOGICAL CHANGE

[2. NYCRR, TITLE 16, SECTION 66Ø.1, DEFINITION(14)]

UNDER COMPETITION INCREASES, THE PRICE STREAM SHOULD DECLINE FASTER WHILE THE DEPRECIATION ACCELERATES. BUT ABERRATIONS STEMMING FROM LACK OF SIGNIFICANT COMPETITION IN PARTICULAR MARKETS CAN ALLOW RELATIVELY OBSOLETE TECHNOLOGY TO COMMAND COST-COVERING PRICES FOR SOME UNKNOWN TRANSITION PERIOD, ESPECIALLY IF INSTITUTIONAL PRACTICES (E.G. TRADE BARRIERS) SUPPORT THIS.

SO, ESTIMATING THE APPROPRIATE ECONOMIC LIFE OF ANY COMBINATION OF EQUIPMENT IS NOT A SIMPLE JOB. THE ESTIMATE FOR EACH COMPONENT MAY OR MAY NOT BE INDEPENDENT OF THE ESTIMATE FOR OTHER COMPONENTS. THE PHYSICAL CHARACTERISTICS OF THE EQUIPMENT CURRENTLY AVAILABLE AND CURRENTLY IN PLACE MUST BE CONSIDERED IN LIGHT OF THE PROBABILITIES OF ALTERNATIVES BEING AVAILABLE, AT SPECIFIC PRICES. FINALLY, THERE ARE OPERATION AND MAINTENANCE EXPENSES ASSOCIATED WITH EXISTING AND NEW EQUIPMENT. NO "TYPICAL" DEPRECIATION RESERVE CAN BE CONFIDENTLY AND REALISTICALLY SAID TO EXIST. BEST ESTIMATES MUST YIELD A MINIMAL VALUE OF PRODUCTION COSTS OVER THE PLANNING HORIZON AND FUEL THE FOLLOWING DECISION: FOR ANY GIVEN INCOME STREAM, OLD EQUIPMENT SHOULD BE REPLACED WHEN ITS OPERATING AND MAINTENANCE CHARGES EXCEED THE CARRYING CHARGES PLUS O&M OF NEW EQUIPMENT.

THIS, OF COURSE, IS THE COMPETITIVE MARKET MODEL. WHAT IS DIFFERENT IN A NONCOMPETITIVE, REGULATED MARKET? WELL, ONE THING THAT IS DIFFERENT IS THE PRICE/QUALITY EQUATION. IN A REGULATED MARKET, PRICE CAN BE DRIVEN UP, WITHIN REASON, TO PROVIDE THE DESIRED LEVEL OF QUALITY. IN A COMPETITIVE MARKET, NO FIRM CAN PROVIDE

HIGHER QUALITY IF ITS COST OF DOING SO MEANS IT PRICES ITSELF OUT OF THE MARKET. SO IN A REGULATED MARKET, THE DECISION PROCESS USES THE REVENUE REQUIREMENT AS A DEPENDENT VARIABLE, RATHER THAN THE INDEPENDENT VARIABLE, MAXIMUM COMPETITIVE PRICE, WHICH DETERMINES THE AMOUNT OF INVESTMENT POSSIBLE.

THE TELCO'S "STRANDED INVESTMENT" THEME SAYS THAT EXCESS RESERVE DEFICIENCIES WILL PREVENT THEM FROM COMPETING AS MARKETS "TRANSIT" TOWARDS COMPETITION. IF, PRIOR TO THE TRANSITION (OR, IN SOME ARGUMENTS) DURING) THE TRANSITION FROM REGULATION TO COMPETITION, REGULATORS DO NOT ALLOW AN AMOUNT OF DEPRECIATION IN THE FIRST YEARS OF A NEW SERVICE'S LIFE COMPARABLE TO THAT WHICH WOULD HAVE OCCURED HAD THE ENVIRONMENT BEEN COMPETITIVE, THE COMPANY WILL BE LEFT WITH SIGNIFICANTLY OVERVALUED ASSETS ON ITS BOOKS. UNLIKE A REGULATED MONOPOLY A COMPETITIVE FIRM WILL NOT BE ABLE TO OFFSET UNDERDEPRECIATION IN AN EARLIER PERIOD BY OVERPRICING IN A LATER PERIOD.

BUT IS THE INVESTMENT REALLY "STRANDED?" NO: UNLESS IT IS TOTALLY OBSOLETE IT HAS SOME ECONOMIC VALUE.

MORE IMPORTANTLY, THE ARGUMENT FAILS ON THIS POINT ALONE: THE ASSUMPTION THAT ALL OF THE ASSETS OF THE TELCOS WILL BE USED TO PROVIDE SERVICES THAT MUST BE PRICED BY THE MARKET, BECAUSE IT'S COMPETITIVE. THIS IS CLEARLY NOT THE CASE. STATE REGULATORS KNOW IT. JUDGE GREENE KNOWS IT. AND THE TELCOS, MOST OF ALL, KNOW IT. THE FACT IS, THERE IS STILL A LONG TIME AHEAD OF US DURING WHICH THE COMPANIES CAN RECOVER THEIR INVESTMENT COSTS.

DOES THIS MEAN WE SHOULD STRETCH OUT THE TIME OF RECOVERY? NOT AT ALL. ECONOMIC DEPRECIATION IS STILL A PROPER APPROACH, BUT IT REQUIRES JUDGMENTS. THAT THE ORIGINAL COST OF PLANT SHOULD BE RECOVERED OVER ITS USEFUL LIFE HAS BEEN THE POSITION OF THE NEW YORK PSC FOR DECADES. WE HAVE CONSISTENTLY ALLOWED THE RECOVERY OF THEORETICAL RESERVE DEFICIENCIES, -- LONG BEFORE THE FCC DID -- USUALLY SPREAD OVER THE REMAINING LIFE, BUT OFTEN --AS IN THE CASE OF INSIDE WIRE FOR NEW YORK TEL--AMORTIZED OVER AN ARBITRARY PERIOD. OUR STAFF ACTIVELY PARTICIPATES IN THE TRIENNIAL THREE WAY REPRESCRIPTION PROCESS, AND MAKES ITS OWN INDEPENDENT ANALYSIS. THIS APPROACH APPLIES TO NEW YORK TEL AND CONTEL. BUT WE APPLY THE SAME PROCESS TO THE MANY INDEPENDENT COMPANIES IN OUR STATE, WHICH ARE NOT REGULATED BY THE FCC. FOR VERY SMALL INDEPENDENTS, WE REVIEW DEPRECIATION RATES ON THEIR BEHALF.

THEREFORE, IT IS SIMPLY NOT TRUE THAT DEPRECIATION RATES IN OUR STATE ARE BASED ON REGULATORY TRADITION RATHER THAN ECONOMIC PRINCIPLES. WHERE RESERVE DEFICIENCIES ARE GREAT, THEY ARE PRIMARILY OWING TO RAPID CHANGES IN CENTRAL OFFICE TECHNOLOGY. IN SETTING DEPRECIATION RATES, STAFF CAREFULLY STUDIES THE COMPANY'S PLANS FOR UPDATING SWITCHING. IN SOME INSTANCES, WE HAVE BEEN MORE AGGRESSIVE THAN THE COMPANIES THEMSELVES. BECAUSE WE ARE CONCERNED SO MUCH WITH QUALITY OF SERVICE, WE HAVE NEVER LET OUR DESIRE TO DEPRESS RATES DICTATE DEPRECIATION ALLOWANCES. IF PAST DEPRECIATION RATES WERE LOWER THAN WHAT A COMPANY ASKED FOR, IT WAS BECAUSE THE COMPANY COULD NOT, AND IN SOME CASES DID NOT TRY TO, JUSTIFY A DIFFERENT OUTCOME.

WE STRONGLY ADVOCATE A CASE BY CASE APPROACH, FOR THE REASONS OUTLINED ABOVE. TIMES ARE GOOD NOW, AND MANY COMPANIES CAN DEAL WITH THEIR RESERVE DEFICIENCIES WITHOUT DRIVING RATES UP BECAUSE SALES HAVE BEEN GOOD, AND IN PARTICULAR, THEY HAVE BEEN RECOVERING THROUGH INTERSTATE AND INTRASTATE TOLL SETTLEMENTS HAVE BEEN PROFITABLE.

IN CONCLUSION: I HAVE NO ARGUMENT WITH PROFESSOR PANZER, AND HE HAS NONE WITH ME. I AGREE WITH CHUCK JACKSON AND SUSAN ON THEIR PREMISE, BUT I DO NOT CONCUR IN THEIR CONCLUSION THAT IN ALL CASES ALL TRA 86 SAVINGS SHOULD BE RETAINED BY TELCOS, TO ACCELERATE DEPRECIATION. ECONOMIC DEPRECIATION METHODS ARE EQUIVALENT, FOR FUTURE INVESTMENT, TO PROPERLY APPLIED ACCOUNTING DEPRECIATION. IF TELCO'S REALLY USED IT (ECONOMIC DEPRECIATION) PERHAPS THE RESERVE DEFICIENCY WOULD NOT GROW SO FAST. YOU CAN'T HAVE BOTH A RESERVE REQUIREMENT APPROACH TO PROFITS AND A COMPETITIVE APPROACH TO DEPRECIATION.

FINALLY, LET'S RECOGNIZE GOOD INTENT. IF THE OUTCOMES OF OUR METHODS ARE NOT PERFECT, IT IS BECAUSE NONE OF US HAS PERFECT FORESIGHT. ACTUALLY IF I DID HAVE IT, I WOULD WITHOUT DOUBT MORE PROFITABLY EMPLOY IT IN THE STOCK MARKET THAN AS A REGULATOR.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

11 AM 1:30

CAPITAL RECOVERY
Chair: Charles Jackson

Jeffrey A. Rohlfs, with Susan Leisner and Charles Jackson: The Negative Effects of Tax Reform on the Telephone Industry

The Tax Reform Act of 1986 reduces the number and level of tax rates and eliminates many tax "preferences," including the investment tax credit. Regulatory attention has focused ont he eventual reduction of the corporate tax rate from 46 percent to 34 percent. Reducing tax rates could lead to reductions in the revenue requirements of telephone companies. Several state regulators have already ordered rate reductions.

However, little or no attention has been paid by regulators to the negative effects of the new tax law on the internal cash flow of telephone companies. The elimination of the investment tax credit and the reduction in the level of deferred taxes will seriously exacerbate the problems created by inadequate capital recovery and wild substantially limit the telephone industry's ability to use internal funds to replace and modernize its plant.

While the Federal Communications Commission and a number of states have taken important steps to deal with the inadequate capital recovery practices, the industry is still faced with a $26 billion reserve deficiency. Capital must be recovered more rapidly if the industry is to be in a sound position as markets become increasingly competitive. In the past, the investment tax credit and deferred taxes helped to mask these problems and maintain an acceptable level of internal cash flow. The new tax law will expose the inadequacies of regulatory depreciation and seriously reduce the cash flow of telephone companies. In fact, we estimate that, over the next five years, the tax law changes will produce a cash-flow loss of close to $15 billion associated with new construction.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Edward Zajec

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR013164